

Work Order ID 120506

Wednesday, June 04, 2014 3:07:08 PM

0 *120506*

RUSH

Page 1

Item ID: D3319-1

Revision ID:

Item Name: Forward Wearplate

Start Date: 6/13/14 Start Qty: 12.00

Required Date: 6/13/14 Req'd Qty: 12.00

Reference:

Accept

N900040100

Setup Start *NS1*

Stop *NS2*

Cust Item ID:

Customer:

Approvals: Process Plan: MLJ Date: 14-06-09 Tooling: _____ Date: _____
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Run Start *NR1*

Stop *NR2*

| Sequence ID/ Work Center ID | Operation Description | Set Up/ Run Hours | Tool ID | Tool # | Plan Code | Accept Qty | Reject Qty | Reject Number | Insp. Stamp |
|--------------------------------|--------------------------|----------------------|---------|--------|--------------|---------------|---------------|------------------|----------------|
|--------------------------------|--------------------------|----------------------|---------|--------|--------------|---------------|---------------|------------------|----------------|

| Draw Nbr | Revision Nbr |
|----------|--------------|
|----------|--------------|

| | |
|-------|---|
| D3319 | C |
|-------|---|

100

100

Waterjet

FLOW CNC Waterjet

1010 .050"

FLOW WATER JET

Memo

1-Cut as per Dwg D3319

Dwg Rev: C

Prog Rev: C

2-Deburr if necessary

0.00

0.00

DAS

23

9-89

14-07-9

22

0

110

110

QC

Quality Control

QC2- Inspect parts off machine FAI/FAIB

Memo

0.00

0.00

DAS

23

9-89

14-07-9

22

0

120

120

QC

Quality Control

QC8- Inspect parts - second check

Memo

0.00

0.00

22

DAS
27
9-89
4/7/10

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Page 2

Item ID: D3319-1 Accept ***N900040100*** Setup Start ***NS1***
 Revision ID: Stop ***NS2***
 Item Name: Forward Wearplate
 Start Date: 6/13/14 Start Qty: 12.00 ***12*** Cust Item ID:
 Required Date: 6/13/14 Req'd Qty: 12.00 ***12*** Customer:
 Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

| Sequence ID/ Work Center ID | Operation Description | Set Up/ Run Hours | Tool ID | Tool # | Plan Code | Accept Qty | Reject Qty | Reject Number | Insp. Stamp |
|---|---|----------------------|---------|--------|-------------------|---------------|---------------|------------------|----------------|
| 140 *140* Brake NC Brake NC | NC BRAKE Memo 1- Form using DT8326 & DT8261 as per Dwg D3319 Rev: <u>C</u> 2- Form flat on press using DT8776 block | 0.00 0.00 | | | DAS 30 9-89 | <u>16</u> | | | <u>14/6/14</u> |
| 150 *150* QC Quality Control | QC5- Inspect part completeness to step on W/O Memo | 0.00 0.00 | | | DAS 27 9-89 | <u>16</u> | | | <u>4/7/13</u> |
| 160 *160* Large Fab Large Fab | Weld per dwg A/R Hardcoat steel Batch: <u>10129184</u> Large Fab Memo 1- Layout weld location as per Dwg D3319 using jig D3319-1T3 2- Weld hard surface using DT8755 per QSI 004 and Dwg D3319 Rev: <u>C</u> Qty Part Number Description Batch A/R N/A 228/7560 Hardcoat Rod <u>4</u> | 0.00 0.00 | | | | <u>14</u> | <u>14</u> | <u>14-7-18</u> | |

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Page 3

Item ID: D3319-1 Accept ***N900040100*** Setup Start ***NS1***
 Revision ID: Stop ***NS2***
 Item Name: Forward Wearplate
 Start Date: 6/13/14 Start Qty: 12.00 ***12*** Cust Item ID:
 Required Date: 6/13/14 Req'd Qty: 12.00 ***12*** Customer:
 Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

| Sequence ID/ Work Center ID | Operation Description | Set Up/ Run Hours | Tool ID | Tool # | Plan Code | Accept Qty | Reject Qty | Reject Number | Insp. Stamp |
|---|---|----------------------|---------|--------|--------------|---------------|---------------|------------------|------------------------------|
| 170 *170* QC Quality Control | QC10- Inspect visual per QSI004- ground welds Memo | 0.00 0.00 | | | | 14 | | | |
| 180 *180* QC Quality Control | QC5- Inspect part completeness to step on W/O Memo | 0.00 0.00 | | | | 14 | | | |
| 190 *190* Powdercoat Powder Coating | Grey Sandtex(Ref:4.3.5.6) per QSI005 4.3 128564 Memo START TIME: 9:00 OVEN TEMPERATURE: 400 320° FINISH TIME: 9:30 | 0.00 0.00 | | | | 14 | 0 | 0 | DAS 41 9-89 14-7-23 |

DAS 34 9-89

Work Order ID 120506

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120506

Page 4

Item ID: D3319-1 Accept ***N900040100*** Setup Start ***NS1***
 Revision ID: Stop ***NS2***
 Item Name: Forward Wearplate
 Start Date: 6/13/14 Start Qty: 12.00 ***12*** Cust Item ID:
 Required Date: 6/13/14 Req'd Qty: 12.00 ***12*** Customer:
 Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

| Sequence ID/ Work Center ID | Operation Description | Set Up/ Run Hours | Tool ID | Tool # | Plan Code | Accept Qty | Reject Qty | Reject Number | Insp. Stamp |
|---|---|--|-------------------|--------|--------------|----------------|-----------------|------------------|----------------|
| 200 *200* QC Quality Control | QC3- Inspect Part Finish Memo | 0.00 <i>2B</i> <i>14/07/23</i> 0.00 | DAS 27 9-89 | | | <i>(14)</i> | | | |
| 210 *210* Packaging Packaging | Identify as per dwg & Stock Location: <i>57601</i> Packaging Memo Identify on inside surface using a permanent fine point marker with the following: TCCA-PDA, Dart Aerospace Ltd. P/N: D3319-1, B/N: BXXXXX For Product Eligibility see PDA05-18 and Stock Location: _____ | 0.00 0.00 | | | | <i>14/7/23</i> | <i>17</i> | <i>CC</i> | |
| 220 *220* QC Quality Control | QC21- Final Inspection - Work Order Release Memo | 0.00 0.00 | | | | <i>ML5</i> | <i>14-07-24</i> | | <i>14-7-23</i> |

Picklist Print

Page 1

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Work Order ID: 120506

120506

Parent Item: D3319-1

D3319-1

Parent Item Name: Forward Wearplate

Start Date: 6/13/14

Required Date: 6/13/14

Start Qty: 12.00

Required Qty: 12.00

Comments: IPP: B05.10.14Added step 9, dwg rev B KJ/EC
IPP Rev:C Now on Waterjet 06-10-26 JLM

| Component Item ID/ Item Name | Replacement Item ID | Mfg/ Purch | Bin Item | Primary Location | Last Location | Route Seq ID | Unit of Measure | Qty on Hand | Qty per Kit | Total Qty | Qty Issued | Date Issued | Status |
|---------------------------------|------------------------|---------------|-------------|---------------------|------------------|-----------------|--------------------|----------------|-------------|--------------------|---------------|----------------|-------------------|
| M1010S18GA | | Purchased | No | | | 100 | sf | 145.9709 | 0.628 | 8 15 | | | DAS 23 9-89 |
| *M1010S18GA* | | | | | | | | | | | | | |
| 1010/1025 SHEET .048 | | | | | | | | | | | | | |

LocationLoc QtyLoc Code

MAT019

145.9709

116268

0.970948

117806

18

124428

31

m129383

96

129383

14-07-9

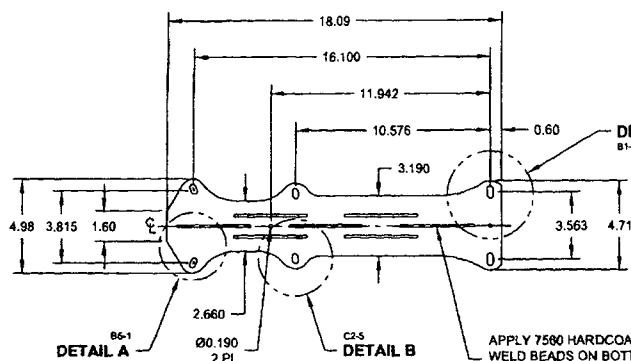
| | | |
|-------------------------------|---------------|-----------------------------|
| DART AEROSPACE LTD | | Work Order: 120506 |
| Description: Wearplate | | Part Number: D3319-1 |
| Inspection Dwg: D3319 | Rev: C | Page 1 of 1 |

FIRST ARTICLE INSPECTION CHECKLIST

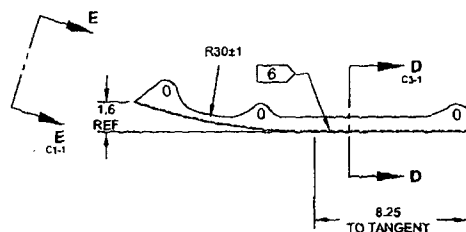
| Drawing Dimension | Tolerance | Actual Dimension | Accept | Reject | Method of Inspection | Comments |
|-------------------|--------------------------|------------------|--------|--------|----------------------|----------|
| 4.98 | +/-0.030 | 4.98" | - | | ✓ | Jkmo. |
| 1.600 | +/-0.010 | 1.602" | - | | ✓ | |
| 2.660 | +/-0.010 | 2.660" | - | | ✓ | |
| 3.190 | +/-0.010 | 3.190" | - | | ✓ | |
| 3.563 | +/-0.010 | 3.563" | - | | ✓ | |
| 4.71 | +/-0.030 | 4.71" | - | | ✓ | |
| 0.60 | +/-0.030 | 0.60" | - | | ✓ | |
| 10.576 | +/-0.010 | 10.576" | - | | ✓ | Jkmo8 |
| 11.942 | +/-0.010 | 11.942" | - | | ✓ | |
| 18.09 | +/-0.030 | 18.09" | - | | T | Jkmo7 |
| Ø0.316 x 0.546 | +0.006/-0.001 x +/-0.010 | 0.316 x 0.546" | - | | ✓ | |
| Ø0.316 x 0.670 | +0.006/-0.001 x +/-0.010 | 0.316 x 0.670" | - | | ✓ | |
| Ø0.190 | +0.005/-0.001 | 0.190" | - | | ✓ | |
| 3.815 | +/-0.010 | 3.815" | - | | ✓ | |
| 16.100 | +/-0.010 | 16.100" | ✓ | | T | |
| | | | | | | |
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|--|----------------------|------------------------------|
| Measured by: DAS 23 9-89 | Audited by: | Preliminary Approval: |
| Date: 14-07-9 | Date: 14/7/10 | Date: |

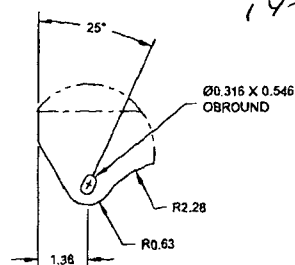
| Rev | Date | Change | Revised by | Approved |
|-----|----------|----------------------------------|------------|----------|
| A | 07.05.31 | New Issue | KJ/JLM | |
| B | 12.05.15 | Dimensions updated per Dwg Rev C | KJ | |



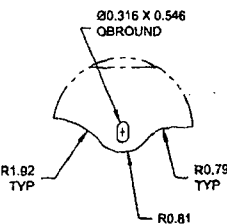
D3319-1F FLAT PATTERN



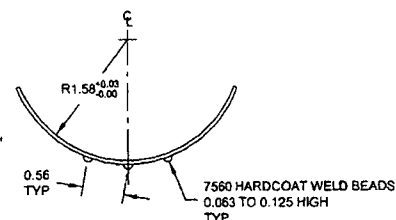
D3319-1 BENDING DETAIL
MAKE FROM D3319-1F



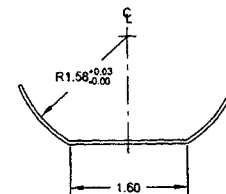
DETAIL A
SCALE 4X
C6-1



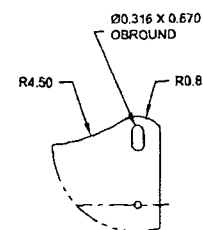
DETAIL B
SCALE 4X
C6-1



SECTION D-D
SCALE 4X
B6-1



SECTION E-E
SCALE 4X
B6-1



DETAIL C
SCALE 4X
C6-1

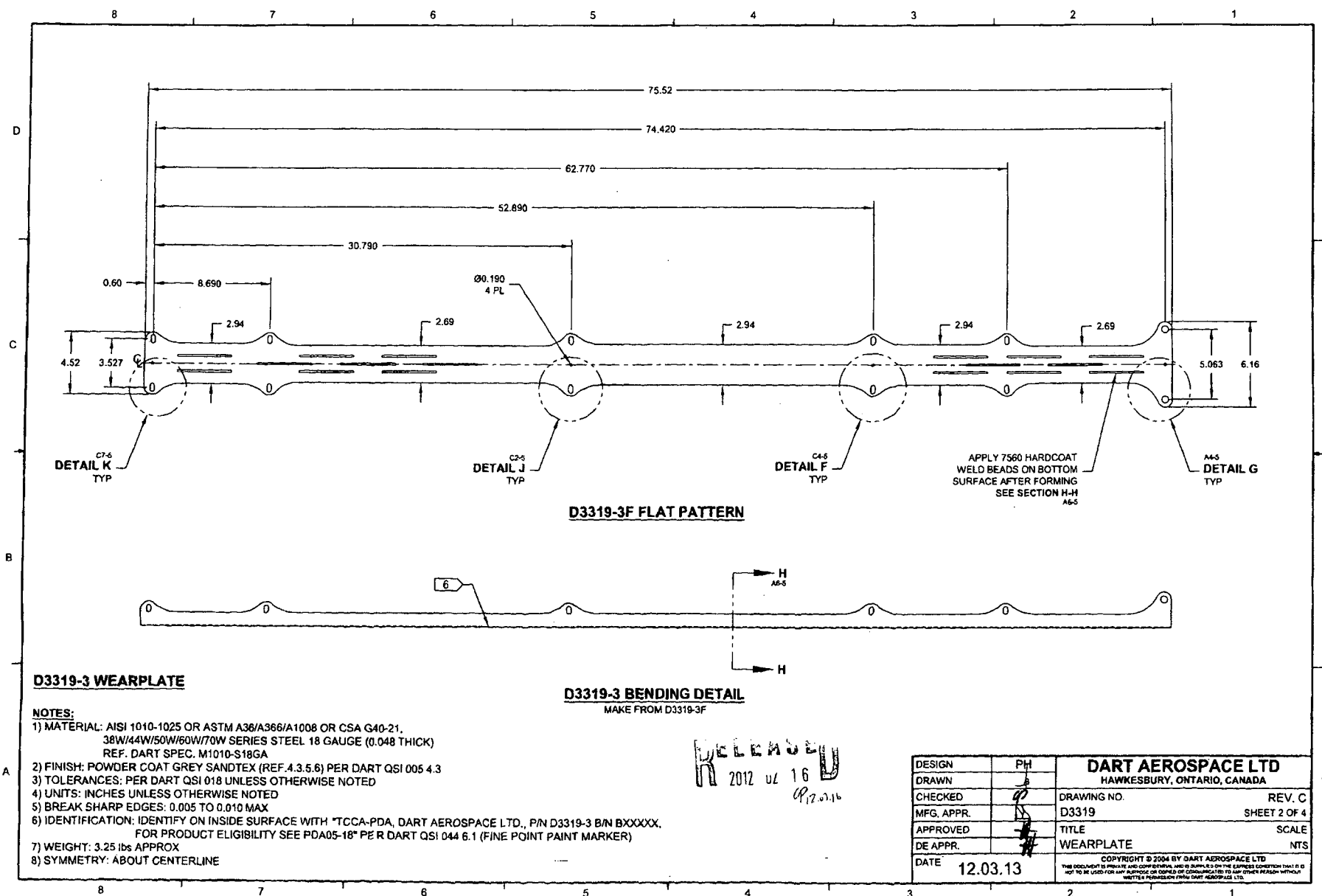
D3319-1 WEARPLATE

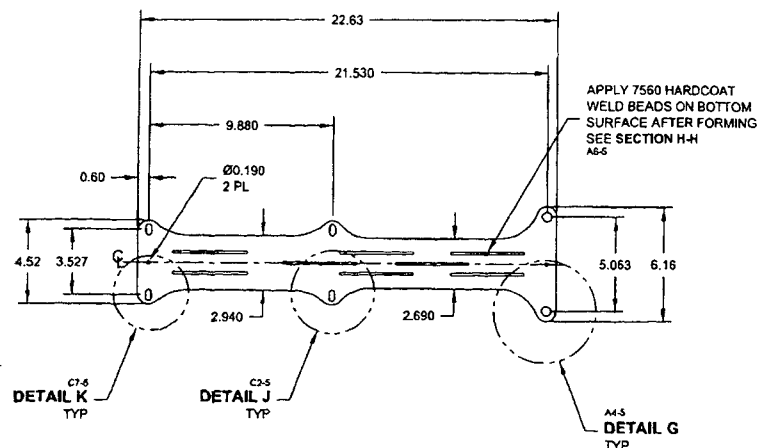
NOTES:

- 1) MATERIAL: AISI 1010-1025 OR ASTM A36/A366/A1008 OR CSA G40-21, 38W/44W/50W/60W/70W SERIES STEEL 18 GAUGE (0.048 THICK) REF. DART SPEC. M1010-S18GA
- 2) FINISH: POWDER COAT GREY SANTEX (REF.4.3.5.6) PER DART QSI 005 4.3
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY ON INSIDE SURFACE WITH "TCCA-PDA, DART AEROSPACE LTD., P/N D3319-1 B/N BX000X, FOR PRODUCT ELIGIBILITY SEE PDA05-18" PER DART QSI 044 6.1 (FINE POINT PAINT MARKER)
- 7) WEIGHT: 0.90 lbs APPROX
- 8) SYMMETRY: ABOUT CENTERLINE

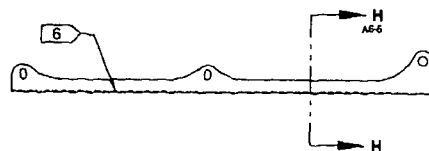
RELEASED
2012-03-16
PER ECN 12-546 12-03-16

| | | | |
|------------|--|--|----------|
| C | UPDATE TO CURRENT STANDARDS IAW QSI 043; CLOSED AFT MOST HOLE ON -3/5-7 (REF DETAIL G); SEE NCR12-547. | MB | 12.03.13 |
| B | WIDEN HOLES, REDUCE WIDTH ON -3/5-7 | PH | 05.06.08 |
| A | NEW ISSUE | PH | 04.09.24 |
| REV. | DESCRIPTION | BY | DATE |
| DESIGN | PH | DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA DRAWING NO. D3319 SHEET 1 OF 4 TITLE WEARPLATE SCALE NTS COPYRIGHT © 2004 BY DART AEROSPACE LTD This document is private and confidential. It is supplied on the express condition that it is not to be used for any purpose or copied, reproduced or otherwise disclosed without written permission from DART AEROSPACE LTD. | |
| DRAWN | | | |
| CHECKED | | | |
| MFG. APPR. | | | |
| APPROVED | | | |
| DE APPR. | | | |
| DATE | 12.03.13 | | |

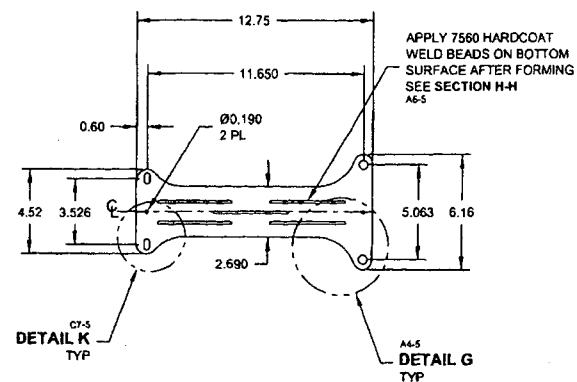




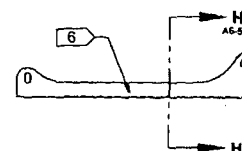
D3319-5F FLAT PATTERN



D3319-5 BENDING DETAIL
MAKE FROM D3319-5F



D3319-7F FLAT PATTERN



D3319-7 BENDING DETAIL
MAKE FROM D3319-7F

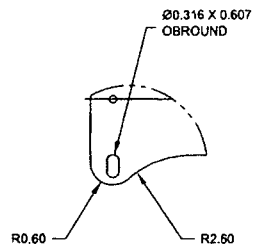
D3319-5/-7 WEARPLATE

NOTES:

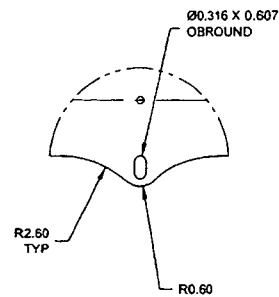
- 1) MATERIAL: AISI 1010-1025 OR ASTM A36/A366/A1008 OR CSA G40-21, 38W/44W/50W/60W/70W SERIES STEEL 18 GAUGE (0.048 THICK)
REF. DART SPEC. M1010-S18GA
- 2) FINISH: POWDER COAT GREY SANDTEX (REF.4.3.5.8) PER DART QSI 005 4.3
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY ON INSIDE SURFACE WITH "TCCA-PDA, DART AEROSPACE LTD., P/N D3319-X B/N BXXXXX, FOR PRODUCT ELIGIBILITY SEE PDA05-18" PER DART QSI 046 6.1 (PERMANENT MARKER)
- 7) WEIGHT: D3319-5 = 1.05 lbs APPROX; D3319-7 = 0.60 lbs APPROX
- 8) SYMMETRY: ABOUT CENTERLINE

RELEASED
2012-02-16
U
4/12/03/16

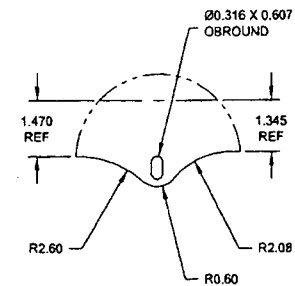
| | | | |
|------------|----------|--|--------------|
| DESIGN | PH | DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA | |
| DRAWN | | DRAWING NO. | REV. C |
| CHECKED | | D3319 | SHEET 3 OF 4 |
| MFG. APPR. | | TITLE | SCALE |
| APPROVED | | WEARPLATE | NTS |
| DE APPR. | | COPYRIGHT © 2004 BY DART AEROSPACE LTD THIS DOCUMENT IS UNCLASSIFIED AND IS SUPPLIED ON THE BASIS OF THE CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSES OR FOR THE DISSEMINATION OF INFORMATION TO ANY OTHER PERSON WITHOUT THE WRITTEN PERMISSION OF DART AEROSPACE LTD. | |
| DATE | 12.03.13 | | |



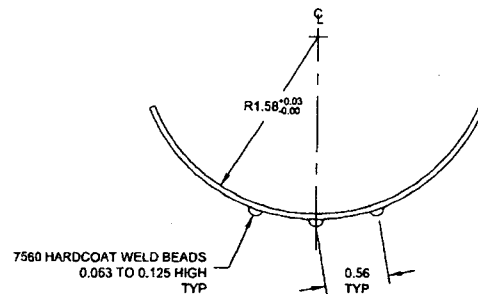
DETAIL K
SCALE 2X
B8-2
C4-3
C8-3



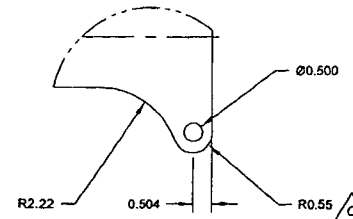
DETAIL F
SCALE 2X
B8-2



DETAIL J
SCALE 2X
B8-2
C7-3







SECTION H-H
SCALE 4X
B4-2
B3-3
B6-3



DETAIL G
SCALE 2X
B8-2
C2-3
C6-3

RELEASED
2012-02-16
4/2.03.16

| | | | |
|--|---|--|--------------|
| DESIGN | PH | DART AEROSPACE LTD | |
| DRAWN | | HAWKESBURY, ONTARIO, CANADA | |
| CHECKED |  | DRAWING NO. | REV. C |
| MFG. APPR. |  | D3319 | SHEET 4 OF 4 |
| APPROVED |  | TITLE | SCALE |
| DE APPR. |  | WEARPLATE | NTS |
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